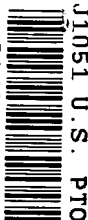


Reissue

01/23/02



Please type a plus sign (+) inside this box → [+]

PTO/SB/50 (02-01)
Approved for use through 01/31/2004. OMB 0651-0033
U.S. Trademark Office; U.S. DEPARTMENT OF COMMERCE

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REISSUE PATENT APPLICATION TRANSMITTAL

Address to:

Commissioner for Patents
Box Reissue
Washington, DC 20231

Attorney Docket No.	740107-139
First Named Inventor	M. Azuma
Original Patent Number	6,142,138
Original Patent Issue Date (Month/Day/Year)	November 7, 2000
Express Mail Label No.	

APPLICATION FOR REISSUE OF: ☒ Utility Patent ☐ Design Patent ☐ Plant Patent

APPLICATION ELEMENTS (37 CFR 1.173)

1. ☒ Fee Transmittal Form (PTO/SB/56)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status. See 37 CFR 1.27.
3. ☒ Specification and Claims in double column copy of patent format (amended, if appropriate)
4. ☒ Drawing(s) (proposed amendments, if appropriate)
5. ☒ Reissue Oath/Declaration (original or copy)
(37 C.F.R. § 1.175) (PTO/SB/51 or 52)
6. ☐ Power of Attorney
7. Original U.S. Patent currently assigned? ☒ Yes ☐ No
(If Yes, check applicable box(es))
☒ Written Consent of all Assignees (PTO/SB/53)
☒ 37 C.F.R. § 3.73(b) Statement
(PTO/SB/96) (unsigned)
8. ☐ CD-ROM or CD-R in duplicate, Computer Program
(Appendix) or large table
9. Nucleotide and/or Amino Acid Sequence Submission
(If applicable, all of the following are necessary)
 - a. ☐ Computer Readable Form (CFR)
 - b. Specification Sequence Listing on:
 - i ☐ CD-ROM (2 copies) or CD-R (2 copies): or
 - ii ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

10. ☒ Statement of status and support for all changes to the claims. See 37 CFR 1.173(c).
11. ☐ Original U.S. Patent for surrender
☐ Ribbioned Original Patent Grant
☐ Statement of Loss (PTO/SB/55)
12. ☐ Foreign Priority Claim (35 U.S.C. 119)
(If applicable)
13. ☒ Information Disclosure ☐ Copies of Statement (IDS)/PTO-1449 Citations
14. ☐ English Translation of Reissue Oath/Declaration (If applicable)
15. ☐ Preliminary Amendment
16. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
17. Other: STATEMENT OF MANI FISCHER

18. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label 22204 or ☐ Correspondence address below
(Insert Customer No. or Attach bar code label here)

Name			
Address			
City	State	Zip Code	Fax
Country	Telephone		

NAME (Print/Type)	David S. Safran	Registration No. (Attorney/Agent)	27,997
Signature		Date	1/23/02

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NVA212432.1

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REISSUE APPLICATION FEE TRANSMITTAL FORM						Docket Number (optional)		
Claims as Filed - Part 1								
Claims in Patent		Number Filed in Reissue Application	(3) Number Extra	Small Entity		Other than a Small Entity		
				Rate	Fee			
(A) 4	Total Claims (37 CFR 1.16(j))	(B) 6	**** 0 =	X \$ ____ =		or	X \$ ____ =	
(C) 2	Independent claims (37 CFR 1.19(i))	(D) 4	* 2 =	X \$ ____ =			X \$ 84.00 =	\$168.00
Basic Fee (37 CFR 1.16(h))						\$740.00		\$740.00
Total Filing Fee						\$	OR	\$908.00
Claims as Amended - Part 2								
	(1) Claims Remaining After Amendment		(2) Highest Number Previously Paid For	(3) Extra Claims Present	Small Entity		Other than a Small Entity	
					Rate	Fee		
Total Claims (37 CFR 1.16(j))	***	MINUS	**	* =	X \$ ____ =		X \$ ____ =	
Independent Claims (37 CFR 1.16(j))	***	MINUS	*****	=	X \$ ____ =		X \$ ____ =	
Total Additional Fee						\$	OR	\$
<p>* If the entry in (D) is less than the entry in (C), Write "0" in column 3.</p> <p>** If the "Highest Number of Total Claims Previously Paid For" is less than 20, Write "20" in this space.</p> <p>*** After any cancellation of claims.</p> <p>**** If "A" is greater than 20, use (B - A); if "A" is 20 or less, use (B - 20).</p> <p>***** "Highest Number of Independent Claims Previously For" or Number of Independent Claims in Patent (C).</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.</p> <p><input type="checkbox"/> Please charge Deposit Account No. _____ in the amount of _____. A duplicate copy of this sheet is enclosed.</p> <p><input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees under 37 CFR 1.16 or 1.17 which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.</p> <p><input checked="" type="checkbox"/> A check in the amount of \$ 988.00 _____ to cover the filing / additional fee is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p style="text-align: center;">WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 30%;"> <p>_____</p> <p style="text-align: center;">Date</p> </div> <div style="width: 60%; text-align: center;"> <p>_____</p> <p style="text-align: center;">Signature of Applicant, Attorney or Agent of Record</p> <p style="text-align: center;">David S. Safran, Reg. No. 27,997</p> <p style="text-align: center;">Typed or printed name</p> </div> </div>								

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re REISSUE Patent Application of)
:)
Masayuki AZUMA et al.)
:)
Patent No. 6,142,138)
:)
Issued: November 7, 2000)
:)
For: ALIGNMENT METHOD AND)
APPARATUS)
:)
)


REQUEST FOR RECORDATION OF ASSIGNMENTS

Box Assignments
Commissioner for Patents
Washington, D.C. 20231

Sir:

Please find attached two (2) requests for recordation of assignment. Please record first the assignment of U.S. Patent No. 6,142,138 from Tokyo Seimitsu Co., Ltd. to Masayuki AZUMA and Hirofumi SHIMODA executed August 17, 2001. Thereafter, please record the assignment of U.S. Patent No. 6,142,138 from Masayuki AZUMA, Hirofumi SHIMODA, and Mani FISCHER to Tokyo Seimitsu Co., Ltd. and Kulicke & Soffa Investments, Inc. executed August 20, 2001 and August 27, 2001.

Respectfully submitted,

By: 
David S. Safran
Registration No. 27,997

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone: (703) 790-9110

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of)
:)
Masayuki AZUMA et al.)
:)
Patent No.: 6,142,138)
:)
Issued: November 7, 2000)
:)
For: HIGH SPEED METHOD OF ALIGNING)
CUTTING LINES OF A WORKPIECE :
USING PATTERNS)

CONSENT OF ASSIGNEE

Commissioner for Patents
Washington, D.C. 20231

Sir:

As owner of an undivided one-half interest in the above-captioned patent, Kulicke & Soffa Investments, Inc. hereby consents to the reissuance of said patent and to the addition of Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel, as an inventor of said patent.

Kulicke & Soffa Investments, Inc.

By: 

Name: Jeffrey C. Moore

Title: Secretary

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of)
Masayuki AZUMA et al.)
Patent No.: 6,142,138)
Issued: November 7, 2000)
For: HIGH SPEED METHOD OF ALIGNING)
CUTTING LINES OF A WORKPIECE)
USING PATTERNS)



CONSENT OF ASSIGNEE

Commissioner for Patents
Washington, D.C. 20231

Sir:

As owner of an undivided one-half interest in the above-captioned patent, Tokyo Seimitsu Co., Ltd. hereby consents to the reissuance of said patent and to the addition of Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel, as an inventor of said patent.

Tokyo Seimitsu Co., Ltd.

By: Hideo Ohtsubo

Name: Hideo Ohtsubo

Title: President

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of)
Masayuki AZUMA et al.)
Patent No.: 6,142,138)
Issued: November 7, 2000)
For: HIGH SPEED METHOD OF ALIGNING)
CUTTING LINES OF A WORKPIECE)
USING PATTERNS)


STATEMENT OF MANI FISHER

Commissioner for Patents
Washington, D.C. 20231

Sir:

I, Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel declare that my name was omitted as an inventor of the above-captioned patent through error without any deceptive intention on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Mani Fischer

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re REISSUE Patent Application of)	
	:	
Masayuki AZUMA et al.)	Group Art Unit: 3723
	:	
Patent No. 6,142,138)	Examiner: T. Eley
	:	
Issued: November 7, 2000)	
	:	
For: ALIGNMENT METHOD AND)	
APPARATUS	:	
)	

Statement Under 37 C.F.R. § 1.173(c)

Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. § 1.173(c), the following statement is provided as to the status of all patent claims and all added claims, and an explanation as to the support in the disclosure for the concurrently made changes to the claims.

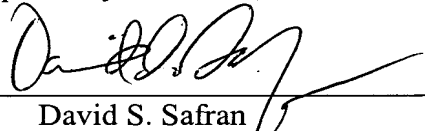
All of the patent claims are maintained and new claims 5 & 6 have been added.

Support for new claim 5 can be found in the patent disclosure as follows. Claim 5 is directed to an alignment apparatus (1) for aligning cutting lines of a workpiece which has a workpiece mounting means (cutting table 12) has an X, Y driving mechanism (72) and a rotational driving mechanism (74). Two imaging means (18, 19) are provide at the cutting blade units (see Fig. 3) and produce images of patterns on the workpiece. A storage means is provided which stores reference patterns at low magnification (low magnification memory 82) and at high magnification (high magnification memory 84). Pattern matching is performed by a comparator (90) which compares current images of patterns (from frame memory 86) with the stored reference patterns of low and high magnification and outputs a pattern matching signal which is used by a control means (controller 92) for driving the workpiece mounting means (see Fig. 4 and the description thereof in column 4).

Support for new claim 6 can be found in the patent disclosure as follows. Claim 6 is directed to dicing machine that has cutting units (14, 16) with a pair of cutting blades (68, 70) and motors (60, 62) for rotating the cutting blades and an alignment apparatus (1) for aligning

cutting lines of a workpiece. Furthermore, a workpiece mounting means (cutting table 12) has an X,Y driving mechanism (72) and a rotational driving mechanism (74). Two imaging means (18, 19) are provide at the cutting blade units (see Fig. 3) and produce images of patterns on the workpiece. A storage means is provided which stores reference patterns at low magnification (low magnification memory 82) and at high magnification (high magnification memory 84). Pattern matching is performed by a comparator (90) which compares current images of patterns (from frame memory 86) with the stored reference patterns of low and high magnification and outputs a pattern matching signal which is used by a control means (controller 92) for driving the workpiece mounting means (see Fig. 4 and the description thereof in column 4).

Respectfully submitted,

By: 
David S. Safran
Registration No. 27,997

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone: (703) 790-9110

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Masayuki AZUMA, Hir fumi SHIMODA, Mani FISCHER

Application No./Patent No.: U.S. Patent 6,142,138 Filed/Issue Date: November 7, 2000

Entitled: HIGH SPEED METHOD OF ALIGNING CUTTING LINES OF A WORKPIECE USING PATTERNS

Tokyo Semitsu Co., Ltd., a corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☐ the assignee of the entire right, title, and interest; or
2. ☒ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is 50 %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

January 23, 2002
Date

David S. Safran, Reg No. 27,997

Typed or printed name

Signature

Title

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